

(No Model.)

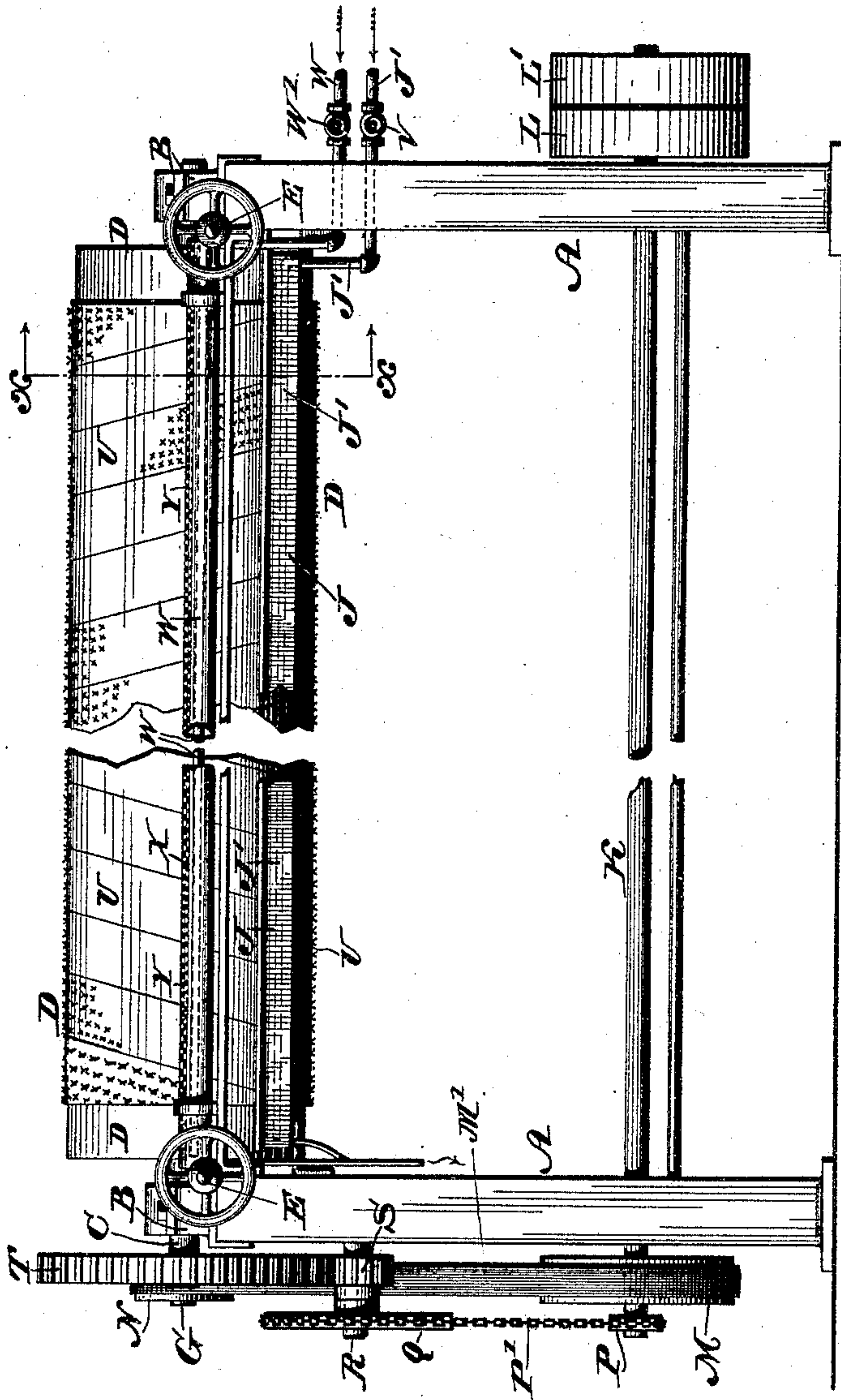
2 Sheets—Sheet 1.

A. F. BORNOT.
MACHINE FOR FINISHING BLANKETS, &c.

No. 444,688.

Patented Jan. 13, 1891.

Fig. 1.



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

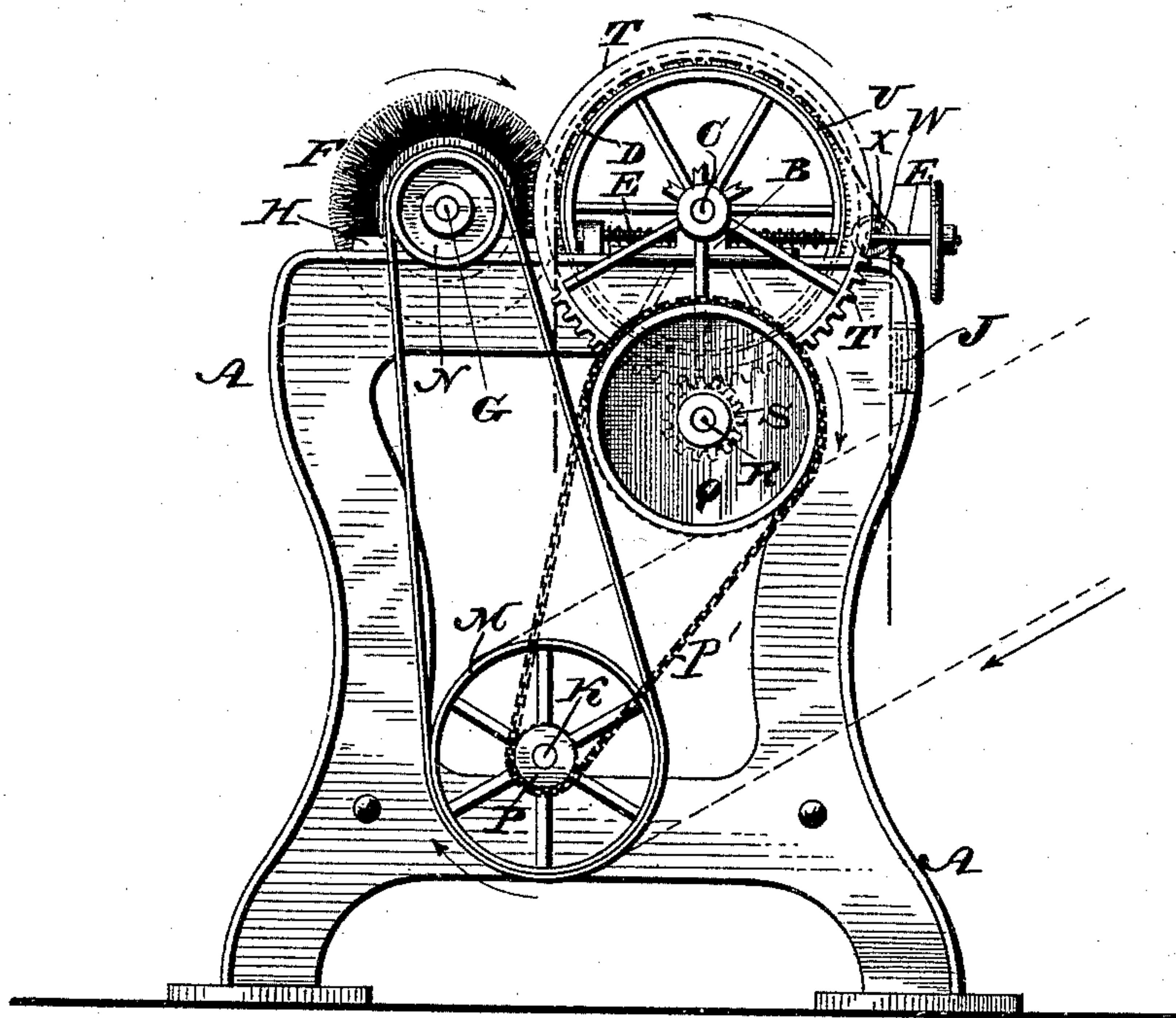


Fig. 3.

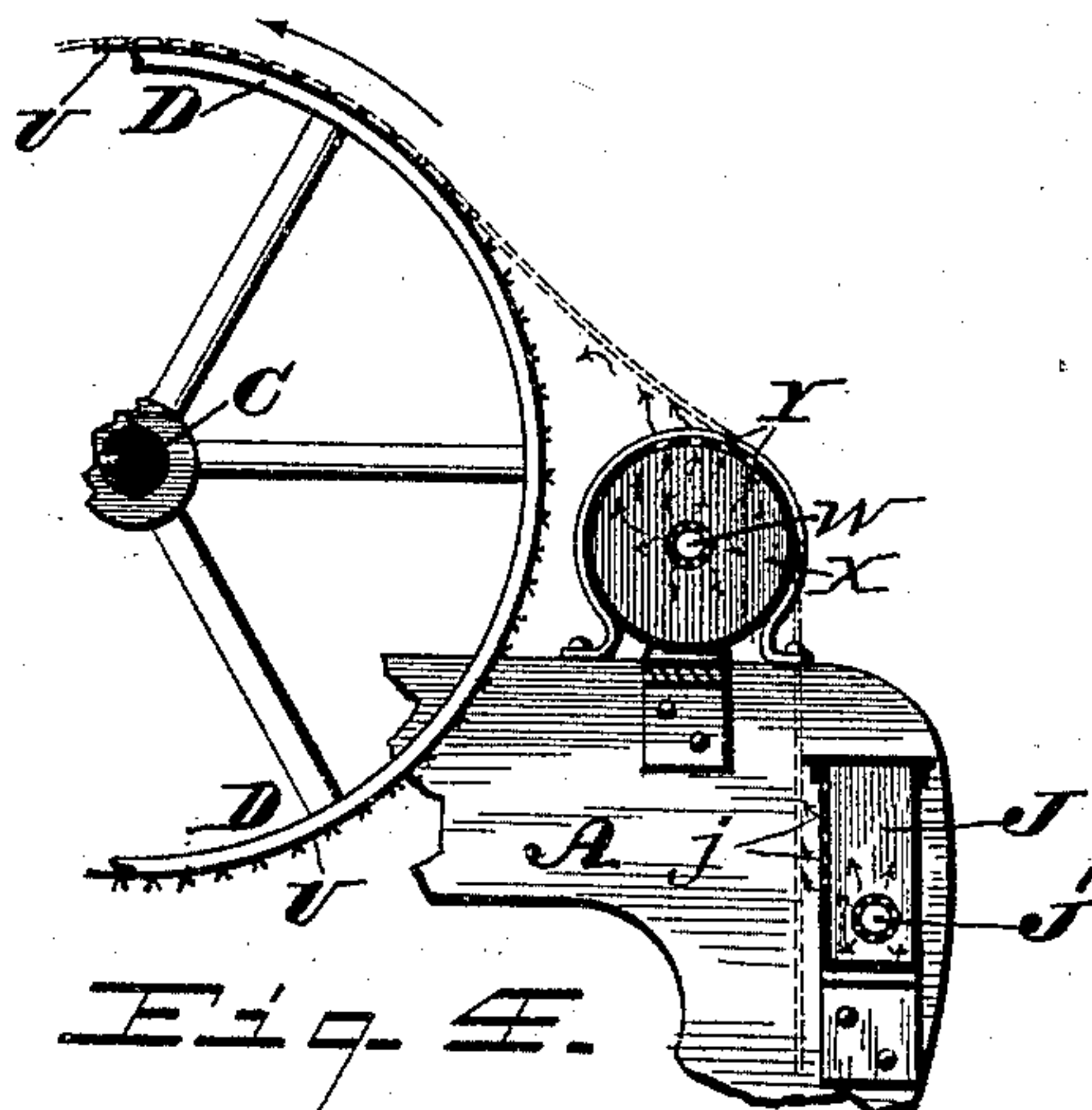
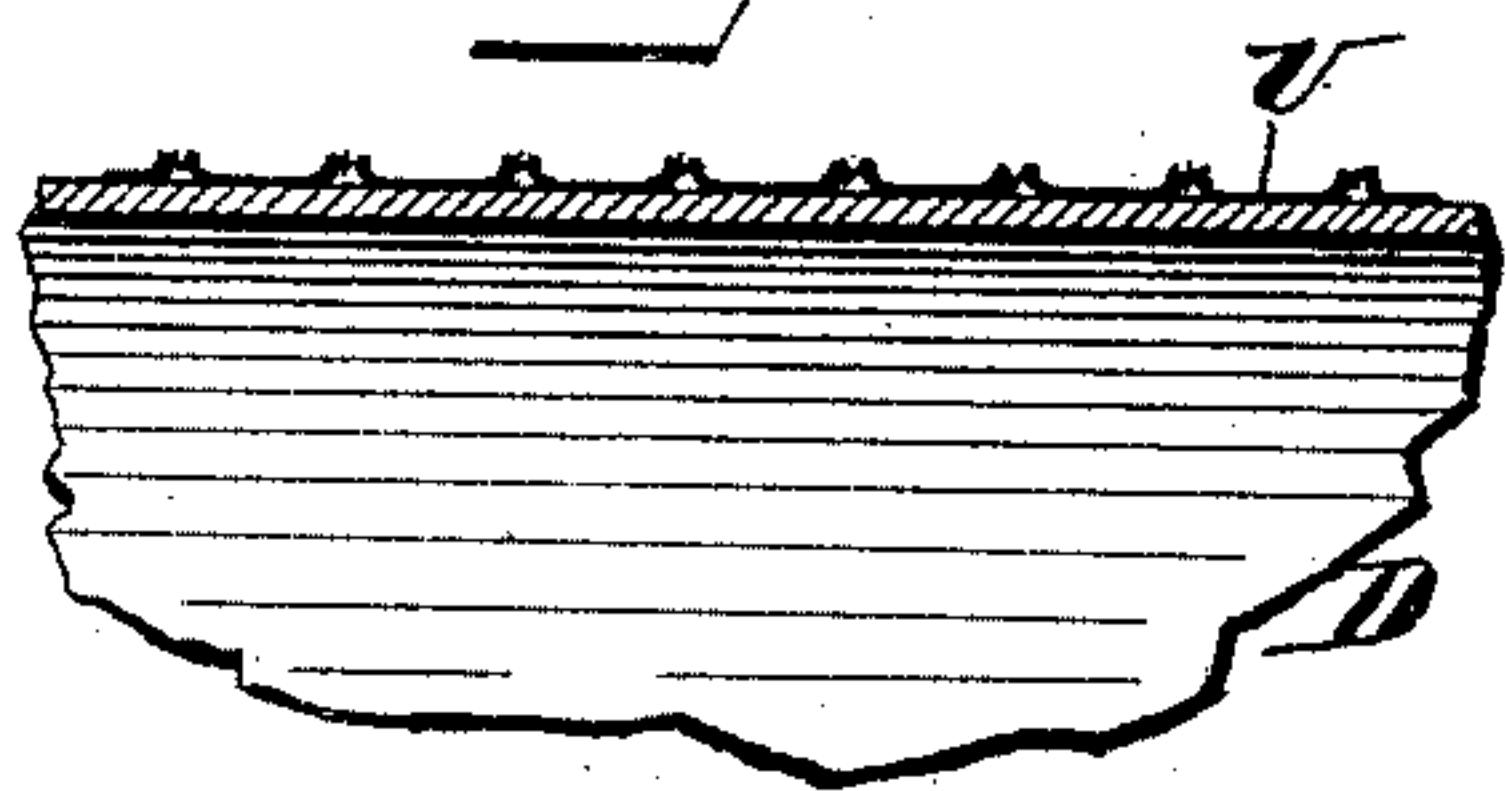


Fig. 4.

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ANDRÉ F. BORNOT, OF PHILADELPHIA, PENNSYLVANIA.

MACHINE FOR FINISHING BLANKETS, &c.

SPECIFICATION forming part of Letters Patent No. 444,688, dated January 13, 1891.

Application filed August 26, 1890. Serial No. 363,097. (No model.) Patented in France July 31, 1889, No. 199,922.

To all whom it may concern:

Be it known that I, ANDRÉ F. BORNOT, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Machines for Finishing Blankets, &c., (for which Letters Patent of France, No. 199,922, of date July 31, 1889, have been obtained by me,) which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in machines for finishing woolen, cotton, or other blankets, &c., after the cleansing of the same; and it consists, first, of a feeding-roller therefor, substantially as described, and, further, of the combination of parts as hereinafter set forth.

In the accompanying drawings, Figure 1 represents a rear view of a machine in elevation embodying my invention. Fig. 2 represents a side elevation of the machine shown in Fig. 1. Fig. 3 represents a sectional view of the feeding-roller on an enlarged scale. Fig. 4 represents a sectional view of a portion on line *x x*, Fig. 1, on an enlarged scale.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates the frame formed of the side standards or uprights, which latter support the boxes B, furnishing bearings for the shaft C of the roller D, forming a feeding as well as a sustaining or backing roller. The boxes B are adjustable on the frame by means of the screws E, which work in said boxes and have their inner ends swiveled to the frame.

In front of the roller D is mounted a rotary brush F, the shaft G of which is journaled in the boxes H on the frame A, and in the rear of the roller is a steam or vapor pan J, having one side formed with perforations *j*, as shown in Fig. 4, and within which is a perforated pipe J', through which the steam escapes, adapted to moisten the blanket in its travel with the roller.

To impart motion to the brush and feeding-roller, the following described mechanism is employed: A driving-shaft K is suitably journaled in the frame A and provided with the fast and loose pulleys L L' to receive motion

from any suitable motor. On the shaft K is a pulley M, having a band M' passing around the same and a pulley N of less diameter on the shaft G of the brush, so that the speed of the said brush is greater than that of the pulley M. On the said shaft K is also mounted a sprocket-pinion P, having an endless chain P' connected with a sprocket-wheel Q on an intermediate shaft R of the frame. A pinion S on the said shaft R meshes with a large gear-wheel T, mounted on the shaft C. By this train of gearing greatly-diminished speed is imparted to the roller, so that the brush revolves much more rapidly than the said roller. The roller D is provided with a sheet-metal covering U, having a roughened surface formed by perforating the same and leaving the punched-up portions projecting. The covering is wound spirally in opposite directions from the center of the roller, as shown, so that when the roller is rotated the blanket engaged by the projecting portions of the walls of the perforations is stretched as it is carried on the same, thereby presenting a taut surface to the brush, which enables the latter to efficiently perform its work. A perforated steam-pipe W extends across the front of the machine parallel with the roller D, and is provided with a shield or guard X, having the perforations Y in the upper side, so as to permit the escape of the steam therefrom on the under side of the blanket while the latter is passing over the same. The said pipe W is also provided with a valve W' to control the flow of steam thereinto. The pipe J' leading to the steam or vapor pan is provided with a valve V, whereby the steam or vapor may be brought into contact with the blanket previous to the brushing thereof, so as to moisten the same, or the blanket may be brushed while in a dry condition, if so desired.

It will be readily seen that by this machine a blanket of any length may be finished without wrinkling of the same, and also that a beautiful finish and a softness is imparted to it by the stretching operation while it is being brushed.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a machine for the purpose set forth,

the combination of a frame, a driving-shaft, a feeding-roller having a covering of sheet metal with roughened surface wound spirally thereon in opposite direction from the center thereof, a rotary brush, and mechanism, substantially as described, for rotating said feeding-roller at a less speed than the brush, substantially as described.

2. In a machine for the purpose set forth, a roller having a covering of sheet metal wound spirally in opposite direction from the center thereof and having a roughened surface, substantially as described.

3. In a machine for the purpose set forth, a feeding-roller having a covering of perforated sheet metal wound spirally in opposite direction thereon from the center thereof and having a roughened surface at the edges of said perforations adapted to engage the fabric, substantially as and for the purpose set forth.

4. In a machine of the character described,

a rotary brush, a feeding-roller having a covering of sheet metal with roughened surface wound spirally thereon in opposite direction from the center thereof, and mechanism for operating said brush at a greater speed than that of the feeding-roller, said parts being combined substantially as described.

5. A machine for the purpose set forth, having a roller with a sheet-metal covering, a perforated steam-pipe parallel with said roller and having a valve therein, a shield or guard with perforations in its upper side, a rotary brush, and mechanism, substantially as described, for operating said brush at a greater speed than that of the feeding-roller, said parts being combined substantially as described.

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Witnesses:

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